

Abstract of the Disclosure

The present invention is directed to methods for the synthesis, selection, amplification and isolation of templated molecules having desirable properties. The invention makes it possible to synthesise a variety of different templated molecules other than alpha-peptides and modified alpha-peptides. In particular, the present invention enables synthesis of templated molecules such as beta -, [Upsilon] -, [π] peptides, carbopeptoids, vinylogous peptides, oligoanthrilamides, oligoureas, azapeptides (azatides), oligocarbamates, PNA, oligopyrrolinones, vinylogous sulfonamidopeptide, peptoids, azapeptoids and hydrazino peptides. It is possible in accordance with the methods of the invention to synthesise templated molecules comprising heterocyclic components, such as coumarins and quinolones, pyrazolone, isoxazolone, pyrimidiones, phthalhydrazides, diketopiperazines, hydantoins, and benzodiazepines.